

IN THE CLAIMS

1. (Currently Amended) A coil spring comprising:  
a plurality of non-overlapping primary wire coils; and; and  
~~a plurality of~~ secondary wire coils, the primary and secondary coils being  
offset from one another, contiguous and differentiated from one another by a dimensional  
size in order to provide variable force and variable deflection, said secondary wire coils  
being disposed between adjoining and contiguous primary wire coils.
  
2. (Original) The coil spring according to claim 1 wherein the secondary coils  
have a smaller diameter than a diameter of the primary coils.
  
3. (Original) The coil spring according to claim 2 wherein the primary and  
secondary coils are concentric.
  
4. (Currently Amended) The coil spring according to claim 2 wherein the  
primary and secondary coils are ~~eccentric~~ offset toward a bottom of the coil spring.
  
5. (Currently Amended) The coil spring according to claim 1 wherein the  
primary and secondary coils are ~~elliptic~~ offset toward a top of the coil spring.
  
6. (Original) The coil spring according to claim 1 wherein the primary and  
secondary coils are round.
  
7. (Original) The coil spring according to claim 1 wherein the primary coils are  
canted and secondary coils are helical.
  
8. (Original) The coil spring according to claim 1 wherein the secondary coils  
are of heavier gauge wire than a wire gauge of the primary coils.

9. (Original) The coil spring according to claim 1 wherein the primary coils are elliptical and the secondary coils are round.

10. (Original) The coil spring according to claim 1 wherein the primary and secondary coils are canted with variable canting.

11. (Original) The coil spring according to claim 1 wherein the primary and secondary coils are disposed in an alternating pattern along a centerline.

12. (Original) The coil spring according to claim 1 wherein the primary and secondary coils are joined to form a garter spring.

13. (Original) The coil spring according to claim 12 wherein the primary and secondary coils are disposed with a concave turn-angle within the garter spring

14. (Original) The coil spring according to claim 12 wherein the primary and secondary coils are disposed with a convex turn-angle within the garter spring.

15. (Original) The coil spring according to claim 1 wherein the primary coil is radial and the secondary spring is axial.

16. (Original) The coil spring according to claim 15 wherein primary and secondary coils are joined to form a garter spring.

17. (Original) The coil spring according to claim 16 wherein the secondary spring is disposed with a concave turn-angle within the garter spring.

18. (Original) The coil spring according to claim 16 wherein the secondary spring is disposed with a convex turn-angle within the garter spring.

19. (Original) The coil spring according to claim 1 wherein at least one of the primary and secondary coils has a D cross-section.

20. (Original) The coil spring according to claim 1 wherein at least one of the primary and secondary coils has a square cross-section.

21. (Original) The coil spring according to claim 1 wherein at least one of the primary and secondary coils has a rectangular cross-section.

22. (Original) The coil spring according to claim 1 wherein at least one of the primary and secondary coils has a triangular cross-section.

23. (Original) The coil spring according to claim 1 wherein at least one of the primary and secondary coils have a cross-section with flat sides.

24. (Original) The coil spring according to claim 1 wherein at least one of the primary and secondary coils is V shaped.

25. (Currently Amended) A coil spring comprising:  
 a plurality of ~~primary wire coils~~ non-overlapping primary and  
~~a plurality of~~ secondary wire coils, the primary and secondary coils being  
 disposed in an eccentric manner about a spring centerline in order to provide variable  
 force and variable deflection, said secondary wire coils being disposed between  
 adjoining and contiguous primary wire coils, said primary and secondary coils being  
 offset toward one of a bottom and a top of the coil spring.

26. (Currently Amended) The coil spring according to claim 25 wherein the  
 secondary coils have a smaller diameter than a diameter of the primary coils, ~~and~~.

27. (Currently Amended) The coil spring according to claim 25 wherein the  
 primary and secondary coils are elliptic and offset toward a bottom of the coil spring.

28. (Currently Amended) The coil spring according to claim 25 wherein the primary coils and secondary coils are ~~round~~offset toward a top of the coil spring.

29. (Original) The coil spring according to claim 25 wherein the primary coils are canted and the secondary coils are helical.

30. (Original) The coil spring according to claim 25 wherein the secondary coils are of heavier gauge wire than a wire gauge of the primary coils.

31. (Original) The coil spring according to claim 25 wherein the primary coils are elliptical and the secondary coils are round.

32. (Original) The coil spring according to claim 25 wherein the primary and secondary coils are canted with variable canting.

33. (Original) The coil spring according to claim 25 wherein the primary and secondary coils are disposed in an alternating pattern along a centerline.

34. (Original) The coil spring according to claim 25 wherein the primary and secondary coils are joined to form a garter spring.

35. (Original) The coil spring according to claim 34 wherein the primary and secondary coils are disposed with a concave turn-angle within the garter spring.

36. (Original) The coil spring according to claim 34 wherein the primary and secondary coils are disposed with a convex turn-angle with the garter spring.

37. (Original) The coil spring according to claim 25 wherein the primary coil is radial and the secondary spring is axial.

38. (Original) The coil spring according to claim 37 wherein the primary and secondary coils are joined to form a garter spring.

39. (Original) The coil spring according to claim 38 wherein the secondary spring is disposed with a concave turn-angle within a garter spring.

40. (Original) The coil spring according to claim 38 wherein the secondary spring is disposed with a convex turn-angle within the garter spring.

41. (Original) The coil spring according to claim 25 wherein at least one of the primary and secondary coils has a D cross-section.

42. (Original) The coil spring according to claim 25 wherein at least one of the primary and secondary coils has a square cross-section.

43. (Original) The coil spring according to claim 25 wherein at least one of the primary and secondary coils has a rectangular cross-section.

44. (Original) The coil spring according to claim 25 wherein at least one of the primary and secondary coils has a triangular cross-section.

45. (Original) The coil spring according to claim 25 wherein at least one of the primary and secondary coils has a cross-section with flat sides.